the cost assumptions. When failed EUS were assumed to be completed as EUA, the mean cost of EUS increased to $586 (95% CI $438, $735), but remained significantly less than EUA. **CONCLUSIONS:** Hospitals pressured to rationalize care create opportunities for early HTA. Cross-over designs are promising for assessments of costs and effectiveness of emerging technologies because patients serve as their own control. This study demonstrated significant savings when ophthalmologic exams were carried out in a hospital outpatient clinic, albeit with slightly fewer procedures completed.

PSS22

OCRIPLASMIN FOR THE TREATMENT OF VITREOMACULAR TRACTION AND MACULAR HOLES: LONG-TERM MODELLING OF CLINICAL AND ECONOMIC VALUE OF RESOLUTION OF TRACTION IN FRANCE

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OBJECTIVES: Persistent attachment between the vitreous and the macula causes vitreomacular traction (VMT) and subsequent formation of a macular hole (MH) leading to symptomatic loss of visual function. This analysis estimated long-term benefits and costs associated with the resolution of traction following treatment with ocriplasmin versus standard-of-care (observation, followed by vitrectomy if needed), in the French health care system, from a collective perspective. **METHODS:** The model included (1) a short-term decision-tree, simulating 6-month anatomical and visual outcomes observed in the two Phase III MIVI-TRUST ocriplasmin randomized controlled trials (RCTs), and (2) a long-term Markov state-transition model, tracking patients over a lifetime-period. Both models were linked through common health states based on VMT resolution or MH closure, number of vitrectomies and visual acuity status. Effectiveness and safety outcomes were based on the MIVI-TRUST RCTs. Patient populations included (1) total licensed VMT population, independent of the presence/absence of a MH, and two subgroups according to pre-specified analyses (2) VMT with epiretinal membrane (ERM), and (3) VMT without ERM. Benefit was measured in quality-adjusted life years (QALYs), based on (1) time spent in health states defined by the visual acuity of the best and worse seeing eye, (2) disutility impact associated with surgical interventions (vitrectomy and cataract), adverse events and metamorphopsia. Resources used with ocriplasmin and standard-of-care were based on expert opinions. Unit costs were mainly drawn from the French national hospital database. **RESULTS:** Over a life-time, ocriplasmin versus standard-of-care generated incremental benefits in terms of QALYs and overall treatment costs in group (1) 0.071; €2,107 (2) 0.034; €2,689, and (3) 0.093; €1,757. Lifetime per-patient cost/QALY was €29,767; €78,393, and €18,917, respectively. **CONCLUSIONS:** Applying commonly accepted cost-effectiveness thresholds (€35,000-€50,000/QALY), this first French cost-utility analysis shows that ocriplasmin represents a cost-effective strategy in total licensed VMT population, and particularly in patients without ERM.

PSS23

COST UTILITY ANALYSIS OF AFLIBERCEPT, RANIBIZUMAB, AND BEVACIZUMAB FOR THE TREATMENT OF NEOVASCULAR AGE-RELATED MACULAR DEGENERATION

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OBJECTIVES: To evaluate the cost-effectiveness of intravitreal aflibercept compared with ranibizumab and bevacizumab for wet age-related macular degeneration (AMD) patients. **METHODS:** A Markov model was applied in cost-utility analysis to evaluate the incremental cost-effectiveness ratio (ICER) between aflibercept, ranibizumab, and bevacizumab from societal perspective over 12 years. Patients switched to as-needed based dosing after one year on the FDA approved regimens. Yearly transitional probabilities were obtained and extrapolated from two-year randomized control trials. Direct medical costs, resource utilization and utility scores were estimated and calculated using the Medicare National Physician Fee Schedule and other published studies. Costs were adjusted and reported in 2013 US dollar. Base case was a 78 year-old patient with vision acuity at 60-letter level. The cost-effectiveness threshold was $ 51,749, as three-fold GDP per capita in 2013. One-way sensitivity analyses were performed to test for the robustness of the model. **RESULTS:** The cost-effectiveness ratio (CER) for aflibercept, ranibizumab, and bevacizumab were $31,404, $34,888, 43,096, respectively. The ICER for aflibercept was dominant compared to both ranibizumab and bevacizumab. When caregiver costs were excluded, bevacizumab became the cost-effective treatment (dominated by ranibizumab; the ICER for aflibercept was $73,625). The number of as-needed doses, instruments used for obtaining utility, initial level of vision acuity level and variation in drug costs demonstrated small impact on relative cost-effectiveness. **CONCLUSIONS:** Aflibercept was the cost-effective treatment for AMD patients compared to ranibizumab and bevacizumab from societal perspective.

PSS24

BURDEN OF ILLNESS IN THE MANAGEMENT OF AGE-RELATED MACULAR DEGENERATION: FINDINGS FROM A TIME-AND-MOTION STUDY

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OBJECTIVES: Neovascular age-related macular degeneration (NVAMD) is a costly, debilitating, and progressive disease that profoundly impacts patients' visual acuity. NVAMD is the leading cause of blindness in the developed world. This time-and-motion study investigated the physician, patient, and caregiver time burden associated with the management of patients with NVAMD in the United States. **METHODS:** Quantitative research was conducted in June 2011 and August 2012. A survey was conducted with 57 retina specialists who administered ≥ 50 vascular endothelial growth factor (VEGF)-inhibitor injections per month; 56 of these physicians completed records (patient history and diaries) for ≤ 5 patients scheduled for an office visit within the next 3 weeks for an anti-VEGF injection or monitoring. Additionally, a survey was administered to 75 patients with NVAMD who were aged ≥ 50 years and had received ≥ 1 anti-VEGF injection in the past 6 months. Furthermore, telephone interviews were conducted with 13 caregivers of patients with NVAMD. **RESULTS:** 56 physicians provided data for 221 patients with NVAMD. Management of patients with NVAMD comprised 20% of the health care staff's working week, with an average of 24 staff members involved. An average patient visit for management of NVAMD was 90 minutes (range: 13 minutes to > 4 hours). Patients reported an average time commitment per visit of almost 12 hours, including preappointment preparation (16 minutes), travel (66 minutes), waiting time (37 minutes), treatment time (43 minutes), and recovery (9 hours). Caregivers reported taking time away from work (> 20%) and personal activities (> 25%) to accompany patients to appointments. **CONCLUSIONS:** NVAMD management imposes a substantial time burden on physicians and other staff members, as well as patients and caregivers. There may be a need for additional support and/or reimbursement for services required by patients and caregivers, as well as those provided by physicians.

SENSORY SYSTEMS DISORDERS – Patient-Reported Outcomes & Patient Preference Studies

PSS25

PATIENT ADHERENCE AND NON-PERSISTENCE BEHAVIOUR IN REAL LIFE ACTINIC KERATOSIS (AK) TOPICAL TREATMENT IN THE UK, GERMANY AND FRANCE

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OBJECTIVES: To gain an understanding of the use of self-administered topical therapies for actinic keratosis exploring patients' persistence and adherence behaviour. **METHODS:** The study was conducted as an online longitudinal questionnaire-based survey in the UK, France and Germany between October 2012 and May 2013, among AK patients diagnosed and recruited by a physician +/- one week from any topical therapy initiation. The study design consisted of a baseline questionnaire followed by up to 6 follow-up questionnaires, completed at fortnightly intervals to cover a full treatment course. Persistence was calculated as persistence % = (Actual days of use/Advised days of use) x 100 and Adherence as Adherence % = (Actual times of use/Advised times of use) x 100, both were calculated using thresholds of 100% and 80%. Logistic regression modelling (multivariate analysis) was also performed to investigate causes of non-adherence/persistence among the patients. **RESULTS:** Overall, 224 patients completed the baseline questionnaire. Over 50% of the sample were prescribed diclofenac sodium at baseline, the remaining patients had been prescribed any of imiquimode 5 % or 3,75%, fluorouracil, or fluorouracil + salicylicacid. Over the course of the study approximately 2/3 of the patients remained on the same therapy from baseline to the end of the study and 1/3 ceased therapy or switched at least once. The majority of cases occurred on instruction from a health care professional (HCP). Of those who ceased or switched therapy, 79-94% of patients being non-persistent to their prescribed treatment duration, however, over 90% of patients were reported to be adherent to application. Controlled for treatment, gender and quality of life, patients aged >60 years were significantly more adherent compared to patients aged <60 years. **CONCLUSIONS:** This study reports that 1/3 of topical AK patients switch or prematurely stop treatment suggesting that patients experience issues preventing completion of treatment course.

PSS26

EXAMINING PATIENT PROVIDER COMMUNICATION REGARDING COST IN THE GLAUCOMA PATIENT POPULATION

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OBJECTIVES: Adherence to medications is a significant problem in glaucoma patients. Costs of medications have frequently been cited as barriers to adherence. This study aims to identify the extent of physician-patient communication concerning medication cost during glaucoma medical visits. The study also aims to examine ophthalmologist and patient characteristics that influence whether the ophthalmologist discusses medication costs with the patient during glaucoma medical visits. **METHODS:** English-speaking adults with glaucoma and their ophthalmologists at six geographically diverse ophthalmology practices were recruited for the study. All visits were videotape recorded and transcribed verbatim. Patients were interviewed following their office visit. A research assistant reviewed the patient's medical records noting comorbidities, glaucoma medication use, and glaucoma severity. Ophthalmologists completed a demographic survey. Transcripts were coded to identify whether the ophthalmologist discussed medication cost with the patient during the office visit. Bivariate analyses were performed to examine whether ophthalmologist and patient characteristics were associated with discussion of medication cost. **RESULTS:** Fifteen ophthalmologists and 279 of their glaucoma patients participated in the study. Ophthalmologists discussed medication costs during only 67 (24%) of glaucoma medical visits. Ophthalmologists with more years of experience practicing were significantly more likely to discuss medication cost ($p< 0.03$). Also, ophthalmologists were significantly more likely to discuss medication cost with patients who had higher levels of formal education, were new to using glaucoma medications, and were taking more glaucoma medications ($p< 0.05$). **CONCLUSIONS:** Ophthalmologists do not routinely discuss medication cost during glaucoma patient office visits. Future research is needed to investigate the impact of physician-patient communication concerning medication cost on adherence in the glaucoma patient population.